Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended) A method of controlling transmission timing, comprising:

receiving time alignment bit (TAB) information in a plurality of frames during a predetermined period;

assigning a weighting value to each of multiple units of the TAB information received;

combining ~~time alignment bit (TAB)~~the weighted units of TAB information ~~received during a predetermined period~~;

determining a timing renewal value based on the combination; and

controlling the transmission timing according to the timing renewal value.

2.   (Currently amended) The method of claim 1, further comprising selecting multiple units of the TAB information, on the basis of a predetermined threshold value, prior to assigning the weighting value and combining the selected weighted units of TAB information.

3.   (Original) The method of claim 1, wherein the timing renewal value is determined

by comparing a total value of the combined TAB information with a predetermined threshold

value.

4.   (Currently amended) The method of claim 1, <u>wherein each of the weighting</u>

<u>values is assigned in accordance with the order in which the corresponding unit of TAB</u>

<u>information is received</u>~~further comprising assigning a weighting value to each of multiple units~~

~~of the TAB information prior to combining the weighted units of TAB information~~.

5.   (Currently amended) The method of claim 4,<u> wherein the weighting values are</u>

<u>assigned according to a non-linear relationship</u>~~wherein each of the weighting values is assigned~~

~~in accordance with the order in which the corresponding unit of TAB information is received~~.

6.   (Currently amended) The method of ~~claim 5~~<u>claim 4</u>, wherein the weighting values

are assigned according to a linear relationship.

7.   (Original) The method of claim 1, further comprising decoding the received TAB

information from a bi-orthogonal code, prior to combining the TAB information.

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8.   (Original) The method of claim 7, wherein the received TAB information are encoded by a bi-orthogonal code.

9.   (Original) The method of claim 7, wherein the received TAB information are encoded by a time variant bi-orthogonal code.

10.   (Currently amended) A method of controlling timing, comprising:

checking the timing of a signal transmitted from a user equipment (UE), the timing of the signal being based on a combination of weighted units of time alignment bit (TAB) information;

determining a timing control command value according to a result of the timing check;

converting the timing control command value into a plurality of time alignment bit (TAB) information to control the timing; and

transmitting the plurality of TAB information to the UE.

11.   (Original) The method of claim 10, wherein the timing control command value is converted into repeated TAB information.

12.   (Original) The method of claim 10, wherein each bit of the converted TAB information is encoded by two bits.

13.   (Currently amended) A method of controlling a transmission time of uplink signals, comprising:

receiving a plurality of time alignment bits transmitted from a base station during a predetermined period;

assigning a weighting value to each of multiple units of the plurality of received time alignment bits in accordance with the corresponding order of receipt

determining a deviation of the transmission time by combining the ~~weighted units~~ ~~information~~ of the plurality of received time alignment bits, the combining being performed by adding the weighted units of the plurality of received time alignment bits; and

controlling the transmission time of the uplink signals in accordance with the determined deviation.

14.   (Original) The method of claim 13, wherein each of the plurality of time alignment bits provides complete information of the deviation of the transmission time for a specific time.

15.   (Original) The method of claim 13, wherein no fewer than two of the plurality of

time alignment bits provide complete information of the deviation of the transmission time for a

specific time.

16.   (Currently amended) The method of claim 13, wherein the weighting values are

assigned according to a non-linear relationship the combining is done by adding the plurality of

received time alignment bits.

17.   (Currently amended) The method of claim 16claim 13, wherein the weighting

values are assigned according to a linear relationship the value of each of the plurality of received

time alignment bits is weighted in accordance with the corresponding order of receipt.

18.   (Currently amended) The method of claim 17claim 13, wherein later received

time alignment bits are more heavily weighted.

19.   (Currently amended) A method of controlling a transmission time of uplink

signals in a base station of a wireless communication system using an uplink synchronous

transmission scheme, comprising:

setting a base time for receiving the uplink signals from a plurality of mobile stations;

receiving a particular uplink signal from one of the plurality of mobile stations, the particular uplink signal being based on a combination of weighted units of time alignment bit (TAB) information;

determining a deviation of the transmission time from the base time by comparing the particular uplink signal's transmission time with the base time; and

transmitting a plurality of time alignment bits of a code sequence, from a set of bi-orthogonal code sequences, through a downlink channel to the plurality of mobile stations.

20.   (Original) The method of claim 19, wherein the code sequence is repeatedly transmitted through the downlink channel.

21.   (Original) The method of claim 20, wherein the bi-orthogonal code sequence is composed of two bits.

22.   (Original) The method of claim 10, wherein the timing control command value is determined by various time units.

23.   (Original) The method of claim 10, wherein the timing control command value is converted into a plurality of independent TAB information.

24.   (Original) The method of claim 7, wherein the received TAB information are decoded from the bi-orthogonal code before between two and ten separate pieces of the TAB information, out of a total of ten pieces of the received TAB information, are combined.

25.   (New) A method of controlling transmission tilting, comprising:

combining time alignment bit (TAB) information received in a plurality of frames during a predetermined period;

determining a timing renewal value based on the combination; and

controlling the transmission timing according to the timing renewal value,

wherein the combination of the Tab information is performed using at least one of a selected values among the received TAB information, and a received TAB information to which a weight is assigned.

26.   (New) The method of claim 25, wherein the selection of multiple units of the TAB information is on the basis of a predetermined threshold value, a hard decision method based on a majority vote of hard decision TAB information or a soft decision method based on

an average value of the received Tab information, and is performed prior to combining the

selected units of Tab information.